

Ch #12 136

An Essay  
on Passed March 24  
1825

Acute Peritonitis

by  
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Peritonitis is an inflammatory affection of the Peritoneum, that serous membrane which affords a lining to the parietes of the abdomen, as well as an exterior coat & a means of attachments to its viscera. It is, also, attended by general febrile symptoms; & it has, therefore, all the essential features, which entitle a disease to a place in the Order Phlegmasiae & Claps Pyrexiae of Cullen.

Peritonitis is divided into the Acute & the Chronic. It is the Acute species, that constitutes the subject of this Thesis; & my remarks will be restricted to that form of the disease, to which both sexes are rendered liable by the operation of common causes.

History of Acute Peritonitis. An attack of Acute Peritonitis usually commences with rigors. When reaction takes place, there is fever, marked by thirst; a dry state of the tongue & fauces; a pulse, accelerated, corded, & contracted. The patient soon feels a considerable degree of pain & heat in the abdomen;



& when pressure is made on that part, manifests a greater or lesser degree of tenderness, which may either be limited to a part of the abdomen, or spread over it universally. Though the tongue & fauces are in general dry, as already stated, it is proper to mention, that in some rare instances, they have been observed to retain their natural moisture throughout the course of the disease. The state of the pulse also is subject to great variety at the onset of the disease: while in most cases, it possesses the character of inflammatory action, to a very evident degree; in others, it is scarcely distinguished; & again, in others it is so low, as to be hardly perceptible. The cases which present these deviations of the pulse, will be particularly noticed hereafter.

The local uneasiness increases rapidly, & the abdomen swells. Within twelve or twenty-four hours, the tenderness of the abdomen is raised to such a degree, that the weight of the bed-clothes is then

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intolerable. The abdomen is now tense. The pulse beats from a hundred & twenty, to a hundred & thirty strokes in a minute. The respiration much quickened. The strength, much deprived. The patient cannot bear the least motion; but lies on his back, with the knees drawn up. The skin is dry & hot, though in instances of much nausea & vomiting, or of great pain, it is occasionally damp. The face is flushed, & expresses anxiety. The eyes are red. The tongue is white, as well as dry. The thirst is great. The appetite is diminished. And the patient is restless, & gets but little sleep.

The Stomach, in most cases, is much affected; & a constant sickness, with a vomiting of bile, is experienced. — The intestines, sometimes costive; at others, unusually loose; are at others still perfectly regular. The bladder, also, is affected, & there is a constant inclination to pass urine, attended however with little effect.

As the disease advances, the symptoms are all aggravated. At length, a total cessation of pain suddenly takes place; an omen, which indicates, almost certainly, a fatal issue. The pulse sinks, but moves so rapidly as not to be counted. No dark matter, like

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coffee grounds, is ejected from the stomach by singultus. Cold clammy sweats break out. The extremities are cold. The countenance is collapsed & haggard. The urine & feces are passed involuntarily. And difficult respiration is succeeded by the fatal event, which usually takes place before the eighth day.

#### - appearances on Dissections -

On dissection, the marks of inflammation appear, on every part of the Peritonæum; with the exception, as has been stated, of the anterior. The Peritonæum is thicker, & less transparent. Its arteries are injected with red blood, in most cases, but occasionally, there is found no vestige of the kind. Commonly, there are no traces of inflammation in the abdominal muscles: on the intestinal canal, on the contrary, it is sometimes seen, that the inflammation has involved, not only the muscular, but the, more interior coats also. The sides of this canal, & the duplications of Peritonæum, are much thickened by extravasation into their cellular membrane. The viscera of the abdomen are agglutinated to one another by coagulating lymph. A brownish fluid, like serum, is effused into the Peritoneal cavity, & has mixed with it shreds of coagulating lymph, & sometimes pus. Marks of gangrene however are but seldom visible. These appearances, independently of symptoms, clearly shew that the disease is an inflammation of

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## *the Peritoneum.*

*Prognosis.* This is unfavorable, when the pain in the abdomen suddenly ceases; the pulse sinks; & there is evidence either of effusion, or of gangrene. The following appearances, on the contrary, are to be regarded as favorable. The pulse becomes fuller; softer & less frequent; the skin moist & cool, the respiration easier; the pain & tension of the abdomen, diminishes gradually; the patient able to maintain a sitting posture; & the bowels affected with a gentle diarrhoea towards the close of the disease.

*Diaognosis.* Peritonitis is distinguished from Enteritis, by the absence of that tenismus, which exists in Enteritis, when the lower part of the intestines are inflamed; & by the local pain sustaining no relief from rectal evacuations.

It is distinguished from Colic; by the absence of tormina; & the pain being augmented, rather than abated, by pressure; & especially by the difference of posture, the patient in Peritonitis & Cholera holding to lie on his back, with his knees drawn up; & in Colic, on his abdomen. —

*Causæ.* Among the causes which give a predisposition to Peritonitis, are, habits of intemperance; occupations which involve the body in excessive heat, & exposure to the low temperature of the atmosphere; & a violent cold.

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Acute Peritonitis is excited by acts of violence done to the abdomen; but oftener, by cold applied for some time, either alone or combined with moisture. Thus it may be the consequence of sleeping either in damp sheets or on the ground.

### TREATMENT

The proper treatment of Peritonitis has been a subject for much dispute. The Medical School of Edinburgh recommends the large employment of Opium. Dr. Keen of Dublin employs the spirit of turpentine; in Peritoneal Peritonitis, at the very height of inflammation. While others select as a plan, which appears to be obviously deduced from the pathology of the disease, rest, for its cure chiefly or almost total abstinence.

The plan of treatment now to be detailed is to myself more strongly recommended than any other, not only is it in my own opinion well suited to the case; but in its more important points at least, it derives a powerful sanction from the experience of the present Professor of the Institutes & Practice of Physic in the University of Pennsylvania.

*(Faint handwritten notes, mostly illegible due to fading)*

*Emsection.* In Acute Peritonitis, the lancet is to be con-  
sulted in the various short incisions, & in the extent of  
its employment, it is to be regulated by the effects which  
it produces on the disease, & on the constitution of the pa-  
tient. The appearance of debility existing in the early  
stage is deceptive, & depends on the violence of the attack,  
by which the powers of the system are obscured.

The justice of this remark will be illustrated subse-  
quently, by the effect of a liberal detraction of blood; as  
the pulse will then be found to rise, & the apparent  
debility, previously existing, will be proportionally re-  
moved. It is the advice of Dr. Nathaniel Chapman, that in  
judging of the propriety of Emsection, we should pay no  
regard to the pulse, which is always depressed in pro-  
fusion to the violence of the disease. I should be govern-  
ed then entirely, by the existence of the stage of excitation,  
& by the degree of severity in the local pain & other symp-  
toms.

If the patient be an adult, take at first  $\text{℥xx}$  or  $\text{℥xxx}$   
of blood. If this detraction should <sup>produce</sup> on the symptoms no  
very sensible effect; or if that effect were evidently an im-  
provement, the operation may be advantageously re-  
peated within a few hours.

[illegible]



Typical Blood-letting. Typical venesection is not so  
resorted to, & is necessary in cases of disease or of injury  
applied to the abdomen. As in local inflammations gener-  
ally, a liberal detraction of blood in this way will be  
very useful. It has been conceived that this measure  
might be deferred, until the pain of the abdomen has  
been somewhat diminished; or at least, until the very stu-  
pid effects of the local derangement have been partially  
removed, by transudations. But I should not suppose  
that the liberal institution of the measure, would produce  
any venous effect on the general excitement; & I should be  
inclined, in the sake of securing a slight effect  
in kind to forego the probable advantage to be ob-  
tained from an early use of the remedy.

Purgatives. Immediately after venesection, I would ad-  
minister a dose of Calomel, which the torpid state of the  
bowels generally requires to be large. The dose may be  
gr. XX or even half a drachm. This is to be followed by  
an infusion of Senna with salts, or Elix. Sals alone, ac-  
cording to the case, until several copious evacuations  
have been obtained. If the stomach be so irritable as to  
reject the Calomel, a large cathartic enema may be ad-  
ministered. Evacuating the lower part of the intestines

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has a tendency to favour the retention of purgatives at  
3wards exhibited by the mouth. The Calomel may also  
have combined with it a little Opium, which has does  
not tend to constipation.

I know that the  
propriety of active purging, in acute Enteritis, is a mat-  
ter of dispute. It appears to me however, that, inas-  
much as other reasons, the acknowledged utility of the  
measure in all other cases of Phlogosis; & the service  
which it has done in the analogous case of Purulent  
Enteritis, are fully sufficient to warrant us in extend-  
ing it to the case under consideration.

With re-  
gard to the use of purging, I would adopt here, the rule  
of Dr. Astruc. "So long as there are pain & tension of the  
abdomen, a quick pulse, & offensive stools, I would I should  
be proceed." While the bowels were not under  
the operation of a purgative, I would keep them sol-  
uble, by small doses of Saline Mixtures given every two  
or three hours.

Emollient Enemata will assist in keeping the bowels  
open; but are useful chiefly as internal fomentations  
they may consist of warm water, or flavoured tea.

Warm Emollients are in their immediate effect  
soothing; & ultimately make a great impression on

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the disease. Among the best are a bear's, with peatlice;  
a bag o' musk; or flannels wrung out of hot water.  
They should be so large as to cover the abdomen, & as  
hot as the patient can bear them.

Diaphoretics, next in importance to bloodletting  
is the inducing of perspiration. In the strong language  
of Dr. Cullen, this measure often acts like a charm.  
It does good here in the centrifugal determination which  
it gives to the blood, thus relieving the vessels of the  
Pituitarium or a portion of their contents. For  
this purpose, I would employ the warm Bath, &  
would assist its action by some one of the Diaphoretics  
not combined with Opium. Previously to depletion, by  
the means already recd, Opium would aggravate  
all the symptoms; but after this has been sufficiently  
done, it will do good, as well be its diaphoretic ten-  
dency as by relieving pain & morbid rigidity.

I would imitate the Doxies practice. Dose gr. X every  
three or four hours.

Esiccation. Blisters well timed are of much advantage,  
but are too irritating to be employed in the commencement  
of the case. They should be preceded by copious depletion  
& warm fomentations. When applied, they should be

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To relieve irritation of the stomach,  
& to check bilious vomiting, mucilaginous drinks are advised,  
& the Effervescent draught, with fifteen or twenty drops of  
laudanum, if necessary, may be exhibited.

Diet.— It is unnecessary to say that the diet, in the first  
stage of Acute Peritonitis, ought to be strictly antiphlo-  
gistic. It should consist of such articles as toast-water,  
barley-water, rice-water &c.

Thus have I detailed all the important measures,  
that are required for the treatment of Acute Peritonitis in  
its stage of Excitement. It is in this stage only that our  
efforts afford any prospect of success; & in this stage, there-  
fore, we should bring all our resources to bear upon the  
disease. —

When the pulse sinks, & the other  
symptoms of Collapse supervene; depletion should give  
place to diffusible stimulants. The best of these proba-  
bly is the Spirits of Turpentine. Dr. Chapman says that  
in this case, he has repeatedly seen it of decided util-  
ity. But it is necessary to give it in the dose of a <sup>tea-spoonful</sup> ~~tea~~  
teaspoonful, every two or three hours. It is to be a pist.

*[Faint, illegible handwriting, likely bleed-through from the reverse side of the page.]*

*shot*

*He*



ed however, with Vol. alkali & Wine; & with Sinapisms  
& Blisters to the extremities.

Should Acute Peritonitis be marked at its onset, by a pulse  
scarcely perceptible, & by other signs of extreme prostration;  
we should consider it as a case, not of exhaustion, but of op-  
pression; for it owes its peculiar character entirely to the vio-  
lence of the disease. Here, we are first to make use of small,  
repeated bleedings, the Warm bath, & Diaphoretics, When by these  
measures, we have roused the energies of the system, & established  
a complete reaction, we may freely resort to more copious de-  
pletion. — Peritonitis sometimes begins with slight

tenderness of the abdomen, the pulse scarcely affected, very little  
fever, & no appearance whatever calculated to alarm. But the se-  
quel shows how insidious is this aspect. For suddenly, the pulse  
sinks, the strength fails, & the case proceeds rapidly to a fatal  
close. — A case of this kind occurred last summer in the Alms-  
House of this city. It was mistaken by the prescribing physician,  
a very eminent practitioner, for simple Constipation. I was my-  
self present at the post mortem examination; when the evidence  
of Peritoneal inflammation was found to be very satisfactory,

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